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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,224	07/10/2001	Shinya Tsukizaki	SCED 18.553	7633

26304   7590   02/25/2004

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EXAMINER
SEALEY, LANCE W

ART UNIT	PAPER NUMBER
2671	

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All   b)☐ Some *   c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of 35 U.S.C. 102(e) which forms the basis for all

novelty-related rejections set forth in this Office action:

A person shall be entitled to a patent unless—
(e) the invention was described in a patent granted on an application for patent by another
   filed in the United States before the invention thereof by the applicant for patent, or
   on an international application by another who has fulfilled the requirements of
   paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof
   by applicant for patent.

2.   Claims 1, 2, 4, 6-7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated

by Miyamoto et al. ("Miyamoto," U.S. Pat. No. 6,454,652).

3.   Miyamoto, in disclosing a video game with enhanced three-dimensional character

and background control due to environmental conditions, also discloses, with respect to

claims 1, 4, 6 and 9, a recording medium (main memory **300**, FIG.2) comprising a

recorded program and data (col.7, l.38) to be used in a program execution system (FIG.2)

including a program execution device that executes various programs (coprocessor **200**,

FIG.2), at least one operation device into which are inputted operation requests by the

user as operation instructions to said program execution device (joystick **45**, FIG.6), and a

display device that displays images outputted from said program execution device

(display **58**, FIG.1), wherein said recorded program has a direction maintenance step by

which if, along with a motion of any character on the display device (Mario—see col.37,

ll.18-20), based on an operation instruction about a character motion direction (Mario's

position controlled by joystick), a switching is made from a first scene to a second scene

on the display device and said operation instruction is maintained (col.37, ll.35-42), and

the direction of motion of said character in said second scene is maintained in

coordination with the direction of motion of the character on a map in said first scene at

least immediately before said switching is made (col.37, ll.38-42).

4.   Concerning claims 2 and 7, Miyamoto does not explicitly disclose wherein if said

first scene on the display device is to be drawn based on a coordinate transformation

based on a first viewpoint and said second scene on the display device is to be drawn

based on a coordinate transformation based on a second viewpoint, said direction

maintenance step has a computation step that computes the direction of motion of said

character based on said first viewpoint. However, this disclosure is inherent because the

Miyamoto invention operates on two levels: automatic camera mode and user-controlled

camera mode (col.39, ll.15-17). If, in automatic camera mode, the camera "knows" to

automatically switch to the optimum view of Mario's current position (col.39, ll.36-38),

there must exist a computation step that dynamically computes Mario's position

("direction of motion of said camera based on said first viewpoint"). Therefore, claims 2

and 7 are rejected under 35 U.S.C. 102(e).

5.   In view of the foregoing, the examiner concludes that claims 1, 2, 4, 6-7 and 9

have been anticipated under 35 USC 102(e) by Miyamoto.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed

        or described as set forth in section 102 of this title, if the differences between

the subject matter sought to be patented and the prior art are such that the

subject matter as a whole would have been obvious at the time the invention

was made to a person having ordinary skill in the art to which said subject

matter pertains. Patentability shall not be negatived by the manner in which the

invention was made.

7.   Claims 3, 5, 8 and 10-13 are rejected under 35 U.S.C. § 103(a) as being

unpatentable over Miyamoto.

8.   Regarding claims 3, 5, 8 and 10-12, Miyamoto discloses a recording medium

(main memory **300**, FIG.2) comprising a program and data (col.7, l.38) recorded thereon

and which are to be used in a program execution system (FIG.2) including a program

execution device that executes various programs (coprocessor **200**, FIG.2), at least one

operation device into which are inputted operation requests by the user as operation

instructions to said program execution device (joystick **45**, FIG.6), and a display device

that displays images output from said program execution device (display **58**, FIG.1).

9.   Continuing with the rejection of claims 3, 5, 8 and 10-12, Miyamoto does not

specifically disclose a first computation step which determines, from a motion vector of

any character on the display device by current operation instructions as seen from a

prescribed viewpoint, at least position coordinates of said character, a viewpoint

switching step that switches viewpoints if necessary, based on the position coordinates of

said character. However, disclosure of such a first computation step is inherent because

Mario is assigned a direction ("motion vector") as the joystick controls him (see col.40,

ll.49-51), Mario's position is dynamically computed, as pointed out in the rejection of

claim 2 above, and the viewpoint is automatically switched as Mario moves (FIG.23A

and col.37, ll.35-42). Therefore, Miyamoto discloses the applicants' first computation

step.

10.   Still on the rejection of claims 3, 5, 8 and 10-12, Miyamoto also does not

specifically disclose a second computation step which, if a current operation instruction

(the user controlling Mario with the joystick) is maintained after said switching step (the

changing of the camera viewpoint as Mario moves), determines, from the motion vector

of said any character (the direction Mario is going) by said operation instruction as seen

from the previous viewpoint (which scene Mario is in before the joystick moves him

somewhere), at least the position coordinates of said character, and an image drawing step

that draws a three-dimensional image of said character based on the current viewpoint, in

accordance with the position coordinates of said character obtained by said first

computation step and second computation step. But it is obvious that the position

coordinates of Mario would be determined from the motion vector because Mario's

position is dynamically computed and the motion vector (set by the joystick) would help

to determine where Mario will be next. It is similarly obvious that an image drawing step

would draw a three-dimensional image of said character based on said current viewpoint

because that is classic creation of animation: one image is drawn at a time approximately

every 30 milliseconds so that Mario's movement seems to be one continuous scene to the

viewer, when in reality Mario's movement, and the place on the screen where Mario

finally appears when the joystick action ceases (claim 12, "once said maintained

operation instruction is terminated"), from an animation point of view, is the product of

thousands of drawn images. Therefore, claims 3, 5, 8 and 10-12 are rejected under 35 U.S.C. 103(a).

11.   Miyamoto also does not specifically disclose all of the elements of claim 13. However, Miyamoto does disclose a program execution system (FIG.2) comprising: a program execution device (FIG.2) having a controller, and executing various programs (coprocessor **200**, FIG.2); a display device that displays images outputted from said program execution device (display **58**, FIG.1); at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device, said operation instructions associated with movements of a character displayed on said display device (joystick **45**, FIG.6); said display device further comprising a first viewpoint in which movements of said character is controlled in accordance with a first movement coordinate system (the viewpoint of the left camera in FIG.23A focusing on the left of the two positions of Mario (M)), and a second viewpoint in which movements of said character is controlled in accordance with a second movement coordinate system (the viewpoint of the right camera in FIG.23A focusing on the right of the two positions of Mario (M)), an image processing means configured as a controller program that operates in said controller in said program execution device (the program in col.7, l.38 which resides in main memory **300**, FIG.2), wherein said image processing means further comprises: a first computation means that determines position coordinates of said character in said first display device viewpoint, said position coordinates based on a first motion vector of said character in said first display device viewpoint in accordance with operation instructions (see item 9 above), a viewpoint

switching means that switches from said first display device viewpoint to said second

display device viewpoint if necessary based on the position coordinates of said character

(inherent in the switching from one viewpoint to another that occurs in col.37, ll.35-42), a

second computation means that determines position coordinates of said character in said

second display device viewpoint, said position coordinates based on a second motion

vector of said character in said second display device viewpoint in accordance with

operation instructions (see item 10 above), and an image drawing means that draws a

three-dimensional image of said character in said first or second display device

viewpoint, in accordance with the position coordinates of said character obtained by said

first computation means and second computation means respectively (see the "classic

animation" argument concerning the rejection of claim 12 in item 10 above), wherein if

said operation instruction is maintained during a switch from said first display device

viewpoint to said second display device viewpoint, said second motion vector governing

movement of said character in said second display device viewpoint is controlled in

accordance with said first movement coordinate system (it is obvious that the position

coordinates of Mario would be determined from the motion vector because Mario's

position is dynamically computed and the motion vector (set by the joystick) would help

to determine where Mario will be next, or where Mario will be when the movement of the

joystick ceases), such that movement of said character is consistent between first and

second display device viewpoints while said operation instruction is maintained during

and immediately after the switch between said viewpoints (the first viewpoint is the

viewpoint of the left camera in FIG.23A focusing on the left of the two positions of

Mario (M), and the second viewpoint is the viewpoint of the right camera in FIG.23A focusing on the right of the two positions of Mario), and wherein once said operation instruction is terminated after said switch from said first display device viewpoint to said second display device viewpoint, said second motion vector governing movement of said character in said second display device viewpoint is controlled in accordance with said second movement coordinate system (it is obvious that the position coordinates of Mario would be determined from a motion vector—first, second, etc.--because Mario's position is dynamically computed and the motion vector (set by the joystick) would help to determine where Mario will be next, or where Mario will be when the movement of the joystick ceases).

12.   Accordingly, in view of the foregoing, the examiner concludes that claims 3, 5, 8 and 10-13 have been rendered unpatentable under 35 USC 103(a) by Miyamoto.

Conclusion

Any inquiry concerning this communication or earlier communications from the Office should be directed to the examiner, Lance Sealey, whose telephone number is (703) 305-0026. He can be reached Monday-Friday from 7:00 am to 3:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (703) 305-9798.

Any response to this action should be mailed to:

MS Non-Fee Amendment

Commissioner for Patents

Serial Number: 09/902,224

Art Unit: 2671

P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

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